External and internal visual inspections must be accomplished by a Registered Inspector, but the hydrostatic or pneumatic pressure test, as set forth in \$180.407(g)(1)(viii) and (ix), respectively, may be done by an employee who is not a Registered Inspector provided that—

- (1) The employee is familiar with the cargo tank and is trained and experienced in the use of the inspection and testing equipment used;
- (2) The employer submits certification that such employee meets the qualification requirements to the Associate Administrator, Attn: (DHM-32), Research and Special Programs Administration, Department of Transportation, 400 Seventh Street, SW., Washington, DC 20590; and
- (3) The employer retains a copy of the tester's qualifications with the documents required by §180.417(b).

[Amdt. 180–2, 55 FR 37069, Sept. 7, 1990, as amended by Amdt. 180–3, 56 FR 66287, Dec. 20, 1991; 57 FR 45466, Oct. 1, 1992; Amdt. 180–11, 62 FR 1217, Jan. 8, 1997; 66 FR 45391, Aug. 28, 2001]

§ 180.411 Acceptable results of tests and inspections.

- (a) Corroded or abraded areas. The minimum thickness may not be less than that prescribed in the applicable specification.
- (b) Dents, cuts, digs and gouges. (See CGA Pamphlet C-6 for evaluation procedures.)
- (1) For dents at welds or that include a weld, the maximum allowable depth is $\frac{1}{2}$ inch. For dents away from welds, the maximum allowable depth is $\frac{1}{10}$ of the greatest dimension of the dent, but in no case may the depth exceed one inch.
- (2) The minimum thickness remaining beneath a cut, dig, or gouge may not be less than that prescribed in the applicable specification.
- (c) Weld or structural defects. Any cargo tank with a weld defect such as a crack, pinhole, or incomplete fusion, or a structural defect must be taken out of hazardous materials service until repaired.
- (d) *Leakage*. All sources of leakage must be properly repaired prior to returning a tank to hazardous materials service.

- (e) Relief valves. Any pressure relief valve that fails to open and reclose at the prescribed pressure must be repaired or replaced.
- (f) Liner integrity. Any defect shown by the test must be properly repaired.
- (g) Pressure test. Any tank that fails to meet the acceptance criteria found in the individual specification that applies must be properly repaired.

§ 180.413 Repair, modification, stretching, or rebarrelling of cargo tanks.

- (a) General. For purposes of this section, "stretching" is not considered a "modification" and "rebarrelling" is not considered a "repair." Any repair, modification, stretching, or rebarrelling of a cargo tank must be performed in conformance with the requirements of this section.
- (b) Repair—(1) Non-ASME Code stamped cargo tanks. Any work involving repair on an MC 300, MC 301, MC 302, MC 303, MC 304, MC 305, MC 306, MC 307, MC 310, MC 311, or MC 312 cargo tank that is not ASME Code stamped must be performed by:
- (i) A cargo tank manufacturer holding a valid ASME Certificate of Authorization for the use of the ASME "U" stamp and registered with DOT: or
- (ii) A repair facility holding a valid National Board Certificate of Authorization for the use of the National Board "R" stamp and registered with DOT.
- (2) ASME Code stamped cargo tanks. Any work involving repair on any ASME Code stamped cargo tank must be performed by a repair facility holding a valid National Board Certificate of Authorization for the use of the National Board "R" stamp and registered in accordance with subpart F of part 107 of subchapter B of this chapter.
- (3) The following provisions apply to cargo tank repairs:
- (i) DOT 406, DOT 407, and DOT 412 cargo tanks must be repaired in accordance with the specification requirements in effect either at the time of manufacture or at the time of repair:
- (ii) MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 cargo tanks must be repaired in accordance with either the original specification or with the